

32. (New) The molded article according to claim 17, wherein said molded article is obtained by heat drying under pressing a wet pulp deposited body onto the inner wall of a mold.

REMARKS

Favorable reconsideration of this application, in light of the present amendments and following discussion, is respectfully requested.

Claims 1-32 are pending; Claims 1, 9, 13, and 14 have been amended; Claims 15-32 have been newly added; and no claims have been cancelled herewith.

Applicants respectfully submit that no new matter has been added by this amendment.

In the outstanding Office Action, Figures 20a-20c were objected to; Claims 9 and 11-14 were rejected under 35 U.S.C. § 112, second paragraph; Claims 1-3 and 13 were rejected under 35 U.S.C. § 102(b) as anticipated by Kiyonaga (Japanese Pat. Pub. No. 35-9669); Claim 4 was rejected under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Kelley et al. (U.S. Pat. No. 5,356,518, hereafter Kelley); Claim 5 was rejected under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Utsul et al. (EP 562,590A1, hereafter Utsul); Claims 6-8 were rejected under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Kakemura et al. (U.S. Pat. No. 5,968,616, hereafter Kakemura); Claims 9 and 14 were rejected under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Stevens (U.S. Pat. No. 2,590,221); Claim 10 was rejected under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Mitchell et al. (U.S. Pat. No. 6,010,595, hereafter Mitchell); Claim 11 was rejected under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Brennan (U.S. Pat. No. 4,014,737); and Claim 12 was rejected under 35 U.S.C. § 103(a) as anticipated by

Kiyonaga in view of Mitchell and further in view of Brennan (U.S. Pat. No. 4,014,737).

Applicants thank Examiner Bruenjes and Supervisory Examiner Pyon for the interview granted Applicants' representatives on December 3, 2002. During the interview, exemplary molded articles were shown and proposed amendments to Claims 1, 9, and 14 were discussed. For example, Applicants' representatives explained that Claim 1 recites a specific smoothness: "a center-line average roughness of less than or approximately equal to 50 μm ."

By contrast, as discussed during the interview, Kiyonaga describes that an inner and outer wire net are used to form the molded article. These inner and outer wire nets necessarily result in a rough and uneven surface as the molded article of Kiyonaga dries. Additionally, Kiyonaga describes in the third full paragraph of page 5 that materials other than metal nets will not result in a satisfactory product. Specifically, Kiyonaga describes that "other materials having a special finish, filter cloth, etc. fail to satisfy the conditions required for practical use or for construction." Accordingly, from this description, it is evident that Kiyonaga teaches away from the formation of a smooth surface of the molded article. No agreement was reached during the interview.

With regard to the objection to the drawings, Figures 20a-20c have been amended under separate cover to include the legend "Background Art." This amendment is supported by the Background of the Invention section of the present specification at page 1, for example. Accordingly, Applicants respectfully submit that no new matter has been added by the amendment of Figures 20a-20c.

In response to the rejection of Claims 9 and 11-14 under 35 U.S.C. § 112, second paragraph, Applicants respectfully submit that this rejection is overcome.

Claims 9, 13, and 14 have been amended herewith to remove the noted informalities.

Applicants therefore respectfully request that this rejection be withdrawn.

Regarding the rejection of Claims 1-3 and 13 under 35 U.S.C. § 102(b) as anticipated by Kiyonaga, this rejection is respectfully traversed.

As noted above, Claim 1, from which Claims 2, 3, and 13 depend, recites in part: “the outer and inner surfaces of said article have a center-line average roughness of less than or approximately equal to 50 μm .”² Due to the Applicants’ claimed smooth inner and outer surfaces, a plastic layer may easily adhere to the surface.³ Additionally, the Applicants’ claimed surface smoothness facilitates neat printing on the outer surface and provides a better appearance of the bottle.⁴

Kiyonaga relates to a process for producing a paper product. As noted above, however, Kiyonaga does not in any way disclose or suggest the claimed features recited in Claim 1. Specifically, Kiyonaga does not disclose or suggest that “the outer and inner surfaces of said article have a center-line average roughness of less than or approximately equal to 50 μm ,” as recited in pending Claim 1.

As further noted above, Kiyonaga teaches away from the formation of a smooth surface of a paper article. MPEP § 2121.03, citing W.L. Gore & Assoc. v. Garlock, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), directs that “[a] prior art reference must be considered in its entirety ... including portions that would lead away from the claimed invention.” An obviousness rejection would be improper where the reference teaches away from the Applicants’ claimed invention.⁵

Additionally, there is no recognition in Kiyonaga that a particular surface smoothness would have any particular advantage. Because Kiyonaga does not

² Support for this amendment may be found, for example, on page 5 of the specification.

³ See, e.g., page 4, lines 26-29 of the specification.

⁴ See, e.g., page 4, line 30 through page 5, line 1 of the specification.

⁵ See, e.g., MPEP 2145.

disclose or suggest the Applicants' claimed limitations, does not recognize the benefits of a particular surface smoothness, and teaches away from the formation of a smooth surface, Applicants respectfully submit that pending Claim 1 patentably distinguishes over Kiyonaga. Consequently, Applicants respectfully request that the rejection of Claims 1-3 and 13 be withdrawn.

With regard to the rejection of Claim 4 under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Kelley, Applicants respectfully submit that this rejection is overcome. Claim 4 depends from Claim 1.

As noted above, Kiyonaga fails to disclose or suggest the features recited in Claim 1. Applicants respectfully submit that Kelley fails to remedy the above-noted defects of Kiyonaga.

Kelley relates to a method of producing molded paper pulp articles. However, Kelley does not in any way address the smoothness of the surface of the molded paper pulp articles. Kelley certainly does not disclose or suggest that a particular smoothness of the inner and outer surfaces of the molded product would be beneficial.

Accordingly, as neither Kiyonaga nor Kelley, either alone or in combination, discloses or suggests the Applicants' claimed limitations, Applicants respectfully submit that Claim 1 patentably distinguishes over these two references. Likewise, dependent Claim 4 is considered to patentably distinguish over Kiyonaga and Kelley, either alone or in combination, for the reasons above-noted with respect to Claim 1, from which Claim 4 depends.

In response to the rejection of Claim 5 under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Utsul, it is respectfully submitted that this rejection is overcome. Claim 5 depends from Claim 1.

As earlier noted, Kiyonaga fails to disclose or suggest the limitations recited in Claim 1. It is respectfully submitted that Utsul fails to remedy the defects above-noted with respect to Kiyonaga.

In fact, Utsul describes that an irregular pattern is formed on the surface of the object as a result of molding using a wire net.⁶ Additionally, like Kiyonaga, Utsul describes that the mesh of the wire cannot be too fine, because the article will not properly form.⁷ Therefore, from this description, it is evident that Utsul teaches away from the Applicants' claimed invention.

Accordingly, as neither Kiyonaga nor Utsul discloses or suggests the claimed limitations recited in Claim 1, Applicants request that this rejection be withdrawn.

With regard to the rejection of Claims 6-8 under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Kakemura, it is respectfully submitted that this rejection is overcome.

As previously discussed, Kiyonaga fails to disclose or suggest the Applicants' claimed limitations. Applicants respectfully submit that Kakemura does not remedy the above-noted defects of Kiyonaga.

Kakemura relates to a compound container. The container described in Kakemura has an inner container of a plastic and an outer container of paper.⁸ However, Kakemura does not discuss at all any type of surface smoothness. Moreover, Kakemura does not disclose or suggest that a particular surface smoothness would be beneficial.

Consequently, as neither Kiyonaga nor Kakemura discloses or suggests the Applicant's claimed limitations, Applicants respectfully submit that Claim 1 patentably distinguishes over these references, either alone or in combination.

⁶ Utsul, col. 3, lines 50-57.

⁷ Id., col. 5, lines 3-7.

⁸ Kakemura, Abstract.

Applicants therefore respectfully request that the rejection of Claims 6-8 be withdrawn.

Regarding the rejection of Claims 9 and 14 under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Stevens, Applicants respectfully submit that this rejection is overcome. Claims 9 and 14 depend from Claim 1.

As previously noted, Kiyonaga fails to disclose or suggest the limitations recited in pending Claim 1. Stevens fails to remedy the defects of Kiyonaga.

Stevens relates to a receptacle formed of molded fibers. However, like the previously cited references, Stevens fails to disclose or suggest the smoothness feature recited in pending independent Claim 1. Specifically, Stevens does not disclose or suggest “the outer and inner surfaces of said article have a center-line average roughness of less than or approximately equal to 50 μm .”

Accordingly, as neither Kiyonaga nor Stevens discloses or suggests the limitations recited in independent Claim 1, Applicants respectfully submit that dependent Claims 9 and 14 patentably distinguish over these two references, either alone or in combination. Applicants therefore respectfully request that this rejection be withdrawn.

Claim 10 was rejected under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Mitchell. This rejection is respectfully traversed. Claim 11 depends from Claim 1.

As earlier noted, Kiyonaga does not disclose or suggest the Applicants’ claimed limitations. Mitchell fails to remedy the above-noted defects of Kiyonaga.

Mitchell relates to a multi-ply paper including a mixture of cellulose fibers. Mitchell describes that a softness of the multi-ply paper structure may be controlled

by the composition of the multi-ply mixture.⁹ However, Mitchell does not disclose or suggest any type of surface smoothness characteristic of the multi-ply paper structure.

Therefore, as neither of the references, either alone or in combination, discloses or suggests the Applicants' claimed limitations, Applicants respectfully submit that independent Claim 1 patentably distinguishes over Kiyonaga and Mitchell, either alone or in combination. Likewise, pending dependent Claim 10 is considered to patentably distinguish over these two references, and Applicants respectfully request that this rejection be withdrawn.

With regard to the rejection of Claim 11 under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Brennan, Applicants respectfully submit that this rejection is overcome. Claim 11 depends from Claim 1.

As noted above, Kiyonaga fails to disclose or suggest the features recited in Claim 1. Applicants respectfully submit that Brennan fails to remedy the defects above-noted with respect to Kiyonaga.

Brennan is directed to a method of molding preform. Brennan does not address in any manner the level of smoothness of the surfaces of the finished product. However, like Kiyonaga, Brennan describes that molding is performed using a wire net. Consequently, for reasons similar to those noted above with respect to Kiyonaga, Brennan fails to disclose or suggest the Applicants' claimed limitations.

Accordingly, as neither of the references, either alone or in combination, discloses or suggests the features recited in pending Claim 1, Applicants respectfully submit that dependent Claim 11 patentably distinguishes over Kiyonaga and Brennan for the reasons set forth with respect to Claim 1, from which Claim 11 depends.

⁹ See, e.g., Mitchell, Abstract.

Regarding the rejection of Claim 12 under 35 U.S.C. § 103(a) as anticipated by Kiyonaga in view of Mitchell and further in view of Brennan, Applicants respectfully submit that this rejection is overcome by the present amendment.

Claim 12 depends from Claim 1, and as earlier noted, Kiyonaga, Mitchell, and Brennan fail to disclose or suggest the limitations recited in Claim 1. Applicants therefore respectfully request that this rejection be withdrawn.

New Claims 15 and 16 recite subject matter previously recited in Claim 9. Accordingly, Applicants respectfully submit that no new matter has been added by the addition of new Claims 15 and 16.

Newly added Claims 17-32 recite features believed to patentably distinguish over the references of record. Claim 17, for example, recites, in part:

the outer and inner surfaces of said article have a center-line average roughness of less than or approximately equal to 50 μm , [and] said molded article is formed by inflating a pressing member by feeding a pressurizing fluid into said pressing member at a pressure between approximately 0.01 MPa and approximately 5.0 MPa¹⁰

As noted above, none of the references of record discloses or suggests the claimed center-line average roughness. Additionally, none of the references of record discloses or suggests that the molded article may be formed by inflating a pressing member by feeding a pressurizing fluid into said pressing member as recited in Claim 17. Claims 18-32 are analogous to the subject matter of Claims 2-16.

¹⁰ Support for new Claim 17 may be found, for example, at pages 5 and 9 of the specification. It is therefore respectfully submitted that no new matter has been added by the addition of Claim 17.

Consequently, in view of the foregoing discussion and present amendments, it is respectfully submitted that the pending application is in condition for immediate allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



22850

Tel No: (703) 413-3000

Fax No: (703) 413-2220

JDM:KDP:dmr

I:\attys\kdp\19's\199314US\199314 response 12.11.02

J. Derek Mason, Ph.D.
Registration No. 35,270
Attorney of Record
Katherine D. Pauley
Registration No. 50,607

Marked-Up Copy

Serial No: 09/673,667

Amendment Filed On: 12/20/02

IN THE CLAIMS

Please amend Claims 1, 9, 13, and 14 as shown below.

1. (Twice Amended) A molded article comprising pulp and having an opening portion, a body portion, and a bottom portion, wherein said body portion has no seams, the outer and inner surfaces of said article [are smooth] have a center-line average roughness of less than or approximately equal to 50 μ m, and said body portion has at least one cross-sectional diameter which is greater than a corresponding cross-sectional diameter of said opening portion or greater than another corresponding cross-sectional diameter of said body portion, said corresponding cross-sectional diameter of said opening portion and said another corresponding cross-sectional diameter of said body portion being located within the vertical plane which contains said cross-sectional diameter of said body portion.

9. (Twice Amended) The molded article according to claim 1, wherein said article further has a plastic layer on at least one of the outer and [and/or] the inner surfaces thereof [by vacuum forming or pressure forming, and said plastic layer is obtainable by laminating a plastic film on said molded article while said molded article is heated to a predetermined temperature, followed by gradual cooling].

13. (Amended) The molded article according to claim 1, wherein said molded article is [obtainable] obtained by heat drying under pressing a wet pulp deposited body onto the inner wall of a mold.

14. (Amended) The molded article according to claim [1] 2, wherein [said molded article has a plastic layer on the outer and/or the inner surfaces of said molded article,] said plastic layer is obtained [obtainable] by applying a resin solution or a resin emulsion on said molded article.

Claims 15-32 (New).